

Listing of the Claims:

The listing of the claims below replaces all previous listings of the claims.

1-11. (Cancelled)

12. (Currently Amended) A method for fabricating finely patterned interconnects having low electrical resistance, the method comprising:

- (a) forming a finely patterned metal-containing interconnect having a first grain size on a carrier material, the interconnect bounded on a first side by a first portion of a seed layer and the interconnect bounded on a second side that is opposite to the first side by a second portion of the seed layer; and
- (b) producing a locally delimited thermal region in the finely patterned metal-containing interconnect and moving the locally delimited thermal region in the finely patterned metal-containing interconnect in a direction of the interconnect and parallel to the first and second portions of the seed layer in such a way that a recrystallization of the interconnect is carried out for the purpose of producing an interconnect having a second grain size, the second grain size being enlarged exclusively with respect to the first grain size such that the second grain size is lengthened with respect to the first grain size in the direction of the movement of the thermal region.

13. (Previously Presented) The method of claim 12 wherein the finely patterned interconnect has feature sizes of less than 0.2 μm .

14. (Currently Amended) The method of claim 12 wherein,
in act (a), the interconnect is formed in a primary direction bounded on the first side by the first portion of the seed layer and bounded on the second side that is opposite to the first side by the second portion of the seed layer, and the interconnect is formed in a secondary direction which is substantially perpendicular to the primary direction, the interconnect

formed in the secondary direction bounded on a first side by a first portion of a second seed layer and bounded on a second side that is opposite to the first side by a second portion of the second seed layer, and in act (b), the movement of the thermal region is carried out at an angle of 45 degrees to the primary direction and the secondary direction such that the interconnect in the primary direction and the interconnect in the secondary direction are exclusively lengthened in the direction of movement of the thermal region.

15. (Previously Presented) The method of claim 12 wherein act (b) is carried out repeatedly.
16. (Previously Presented) The method of claim 12 wherein, in act (b), the locally delimited thermal region is produced by means of a fanned-out laser beam, a hot gas, a multiplicity of heating lamps and/or a heating wire.
17. (Previously Presented) The method of claim 12 wherein the locally delimited thermal region is formed in strip-type or point-type fashion.
18. (Cancelled).
19. (Cancelled).
20. (Previously Presented) The method of claim 12 wherein, in act (a), a damascene method is carried out.
21. (Previously Presented) The method of claim 12, wherein the locally delimited thermal region has a temperature of 150 degrees Celsius to 450 degrees Celsius.

22. (Previously Presented) The method of claim 12 wherein the recrystallization is carried out in a protective gas atmosphere or the recrystallization is carried out in a vacuum.

23. (Currently Amended) A method for fabricating finely patterned interconnects having low electrical resistance, the method comprising:

- (a) forming a finely patterned metal-containing interconnect having a first grain size on a carrier material, the interconnect bounded on a first side by a first portion of a seed layer and the interconnect bounded on a second side that is opposite to the first side by a second portion of the seed layer; and
- (b) producing a locally delimited thermal region in the finely patterned metal-containing interconnect and moving the locally delimited thermal region in the finely patterned metal-containing interconnect in a direction of the interconnect and parallel to the first and second portions of the seed layer in such a way that a recrystallization of the interconnect is carried out for the purpose of producing an interconnect having a second grain size, the second grain size being enlarged exclusively with respect to the first grain size such that the second grain size is lengthened with respect to the first grain size in the direction of the movement of the thermal region;

wherein the finely patterned interconnect has feature sizes of less than $0.2\mu\text{m}$.

24. (Cancelled).

25. (Currently Amended) A method for fabricating finely patterned interconnects having low electrical resistance, the method comprising:

- (a) forming a finely patterned metal-containing interconnect having a first grain size on a carrier material, the interconnect bounded on a first side by a first portion of a seed layer and the interconnect bounded on a second side that is opposite to the first side by a second portion of the seed layer; and

- (b) producing a locally delimited thermal region in the finely patterned metal-containing interconnect and moving the locally delimited thermal region in the finely patterned metal-containing interconnect in a direction of the interconnect and parallel to the first and second portions of the seed layer at 1 cm/second in such a way that a recrystallization of the interconnect is carried out for the purpose of producing an interconnect having a second grain size, the second grain size being enlarged exclusively with respect to the first grain size such that the second grain size is lengthened with respect to the first grain size in the direction of the movement of the thermal region.

26. (Cancelled).